

**ADVANCED MECHANICS OF SOLIDS  
ME-504**

**Unit 1: Analysis of stress & Strain**

1. [www.nptel.ac.in/courses/105105108/7](http://www.nptel.ac.in/courses/105105108/7)
2. [www.nptel.ac.in/courses/112101095/](http://www.nptel.ac.in/courses/112101095/)
3. [www.nptel.ac.in/courses/112107146/9](http://www.nptel.ac.in/courses/112107146/9)
4. [www.nptel.ac.in/courses/112105125/pdf/Module-3\\_lesson-1.pdf](http://www.nptel.ac.in/courses/112105125/pdf/Module-3_lesson-1.pdf)
5. [www.nptel.ac.in/courses/105102090/20](http://www.nptel.ac.in/courses/105102090/20)
6. [www.nptel.ac.in/courses/Webcourse-contents/IISc-BANG/.../LNm7.pdf](http://www.nptel.ac.in/courses/Webcourse-contents/IISc-BANG/.../LNm7.pdf)

**UNIT 2: Energy methods**

1. [www.nptel.ac.in/courses/Webcourse-contents/IIT%20Kharagpur/.../m113.pdf](http://www.nptel.ac.in/courses/Webcourse-contents/IIT%20Kharagpur/.../m113.pdf)
2. [www.nptel.ac.in/reviewed\\_pdfs/105106050/lec6.pdf](http://www.nptel.ac.in/reviewed_pdfs/105106050/lec6.pdf)
3. [www.nptel.ac.in/courses/Webcourse-contents/IIT.../lecture39.htm](http://www.nptel.ac.in/courses/Webcourse-contents/IIT.../lecture39.htm)
4. [www.nptel.ac.in/courses/105106049/lecnotes/mainch8.html](http://www.nptel.ac.in/courses/105106049/lecnotes/mainch8.html)
5. [www.nptel.ac.in/courses/.../IIT.../image/.../lecture25%20and%2026.htm](http://www.nptel.ac.in/courses/.../IIT.../image/.../lecture25%20and%2026.htm)
6. [www.nptel.ac.in/courses/105106049/lecnotes/mainch10.html](http://www.nptel.ac.in/courses/105106049/lecnotes/mainch10.html)

**UNIT 3: Bending**

1. [www.nptel.ac.in/courses/112101095/6](http://www.nptel.ac.in/courses/112101095/6)
2. [www.nptel.ac.in/video.php?subjectId=112101095](http://www.nptel.ac.in/video.php?subjectId=112101095)
3. [www.nptel.ac.in/courses/Webcourse.../lecture30%20and%2031.htm](http://www.nptel.ac.in/courses/Webcourse.../lecture30%20and%2031.htm)
4. [www.nptel.ac.in/courses/105106049/lecnotes/mainch10.html](http://www.nptel.ac.in/courses/105106049/lecnotes/mainch10.html)
5. [www.nptel.ac.in/courses/103103027/pdf/mod6.pdf](http://www.nptel.ac.in/courses/103103027/pdf/mod6.pdf)

**UNIT 4: Torsion**

1. [www.nptel.ac.in/courses/Webcourse-contents/IIT.../lecture18.htm](http://www.nptel.ac.in/courses/Webcourse-contents/IIT.../lecture18.htm)
2. [www.nptel.ac.in/courses/112101095/17](http://www.nptel.ac.in/courses/112101095/17)
3. [www.nptel.ac.in/courses/Webcourse-contents/IIT.../image/.../lecture19.htm](http://www.nptel.ac.in/courses/Webcourse-contents/IIT.../image/.../lecture19.htm)
4. [www.nptel.ac.in/courses/Webcourse.../lecture25%20and%2026.htm](http://www.nptel.ac.in/courses/Webcourse.../lecture25%20and%2026.htm)
5. [www.nptel.ac.in/courses/105105104/pdf/m6l16.pdf](http://www.nptel.ac.in/courses/105105104/pdf/m6l16.pdf)
6. [www.nptel.ac.in/courses/112103174/module4/lec3/1.html](http://www.nptel.ac.in/courses/112103174/module4/lec3/1.html)

**UNIT 5: thick walled cylinder**

1. [www.nptel.ac.in/courses/112105125/pdf/module-9%20lesson-2.pdf](http://www.nptel.ac.in/courses/112105125/pdf/module-9%20lesson-2.pdf)
2. [www.nptel.ac.in/courses/112105125/pdf/module-9%20lesson-3.pdf](http://www.nptel.ac.in/courses/112105125/pdf/module-9%20lesson-3.pdf)
3. [www.nptel.ac.in/courses/112101095/15](http://www.nptel.ac.in/courses/112101095/15)
4. [www.nptel.ac.in/Clarify\\_doubts.php?subjectId=112101095&lectureId=15](http://www.nptel.ac.in/Clarify_doubts.php?subjectId=112101095&lectureId=15)
5. [www.nptel.ac.in/courses/112106141/Pdfs/1\\_1.pdf](http://www.nptel.ac.in/courses/112106141/Pdfs/1_1.pdf)
6. [www.nptel.ac.in/courses/105106049/lecnotes/mainch10.html](http://www.nptel.ac.in/courses/105106049/lecnotes/mainch10.html)
7. [www.nptel.ac.in/courses/105106049/pdf-assignments/main.pdf](http://www.nptel.ac.in/courses/105106049/pdf-assignments/main.pdf)

**UNIT 6: Elastic stability**

1. [www.nptel.ac.in/courses/105106050/38](http://www.nptel.ac.in/courses/105106050/38)
2. [www.nptel.ac.in/courses/105106112/6\\_beams/6\\_examples.pdf](http://www.nptel.ac.in/courses/105106112/6_beams/6_examples.pdf)
3. [www.nptel.ac.in/courses/105106050/39](http://www.nptel.ac.in/courses/105106050/39)
4. [www.nptel.ac.in/courses/105102090/17](http://www.nptel.ac.in/courses/105102090/17)
5. [www.nptel.ac.in/courses/105102090/15](http://www.nptel.ac.in/courses/105102090/15)